UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,876	05/22/2007	Jacques Sagne	P19258-US1	7342

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EXAMINER
HWANG, STAMFORD

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
09/08/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/597,876	SAGNE ET AL.
	Examiner	Art Unit	
	STAMFORD HWANG	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 July 2010</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>34-66</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>34-66</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>10 August 2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 07/23/2010 have been fully considered but they are not persuasive.

Regarding Applicant's argument that "The key difference between the present invention and Choi '342 is that, as claimed in claim 34, the present invention specifies that the UE is <u>in a cell group location state</u>, in which state the location of the mobile terminal is stored at the *cell group level*." on Page 9 of **REMARKS/ARGUMENTS**; examiner asserts that Choi '342 does indeed fully disclose the features of the claims. Choi '342 teaches that a RNC has at least one cell and therefore, there exists a cell group in the context of a RNC. As an UE resides in a cell of a RNC, it is therefore residing at a cell group level. Thus the rejection is proper and maintained as repeated below.

Regarding Applicant's argument that "Choi '342 only refers to sending the message to <u>a single RNC</u>, while the present invention claims sending to messages <u>to all the potential DRNCs</u>." on Page 10 of **REMARKS/ARGUMENTS**; examiner asserts that the limitation "potential drift radio network controllers" does not mean more than one DRNCs, however, it is also possible that there could only be one potential DRNC. Therefore, by sending messages from an SRNC to a single DRNC does not violate sending messages from an SRNC to the potential DRNCs. Thus the rejection is proper and maintained as repeated below.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 34, 35, 37-40, 42, 49, 50-53, and 60-63 are rejected under 35

U.S.C. 102(e) as being anticipated by *Choi et al* (WO 2004/064342 A1) (hereinafter

Cho'342).

Regarding **claim 34**, *Choi'342* discloses a method in a radio access network of

handling the mobility of a multimedia service joined mobile terminal in a cell group

location state, in which state the location of the mobile terminal is stored at cell group

level in a context of a radio network controller functioning as a serving radio network

controller (SRNC) for the mobile terminal (=see page 6, lines 31-34), comprising the

steps of:

performing an information transfer at a first trigger event via an Iur-interface

between a serving radio network controller (SRNC) and all radio network controllers

controlling at least one cell in a first cell group and being potential drift radio network

controllers (DRNCs) for the mobile terminal, wherein the information transfer step

comprises the further steps of sending, by the SRNC, a multimedia service attach requesting message to the potential DRNCs (=see page 9, lines 15-19, wherein the SRNC communicates with "a RNC of the target cell" which reads on the DRNC),

the multimedia service attach requesting message comprising context information for the mobile terminal, the context information including multimedia service information (=see page 9, lines 15-19, wherein the "MBMS Connection Request" reads on the multimedia service attach request message; and Fig.4); and

creating and storing, by the potential DRNCs, a context for the mobile terminal based on the received message (=see page 10, lines 27-29, "completes the relevant configuration" reads on creating and storing).

Regarding **claim 35**, *Choi'342* discloses a method according to claim 34, wherein the transferred context information comprises the identity of the joined multimedia service, the identity of the cell group, the temporary identity of the mobile terminal within the network, and the identity of the mobile terminal (=see page 9, lines 15-19).

Regarding **claim 37**, *Choi'342* discloses a method according to claim 34, wherein the trigger event is the SRNC receiving a cell group updating message from the mobile terminal (=see page 9, lines 9-19).

Regarding **claim 38**, *Choi'342* discloses a method according to claim 37, further comprising the steps of:

sending a multimedia service detach requesting message from the SRNC to all potential DRNCs in the previous cell group, if the new cell group comprises only cells controlled by new RNCs (=see page 9, lines 15-19); and

deleting, by the potential DRNCs in the previous cell group, the stored context of the mobile terminal (=see page 11, lines 5-7).

Regarding **claim 39**, *Choi'342* discloses a method according to claim 34, wherein the trigger event is the mobile terminal transiting into the cell group location state from any other state (=see page 11, lines 9-16).

Regarding **claim 40**, *Choi'342* discloses a method according to claim 34, wherein the trigger event is the SRNC receiving a notification from the core network of a start of a multimedia service session (=see page 5, lines 10-19, wherein the "Survey Report" reads on notification).

Regarding **claim 42**, *Choi'342* discloses a method according to claim 34, wherein the multimedia service context comprises the identity of the multimedia service and the temporary identity of the mobile terminal within the radio access network (=see page 8, lines 14-16).

Regarding **claim 49**, *Choi'342* discloses a method according to claim 34, wherein the multimedia service is a Multimedia Broadcasting/Multicasting Service (MBMS), according to the 3GPP standard (=see page 8, lines 7-9).

Regarding **claim 50**, *Choi'342* discloses a method according to claim 34, wherein the multimedia service attach requesting message is an MBMS ATTACH REQUEST,

according to the 3GPP standard (=see page 8, lines 20-23, wherein the "MBMS Connection request" reads on the MBMS ATTACH REQUEST).

Regarding **claim 51**, *Choi'342* discloses a radio network controller in a radio access network functioning as a serving radio network controller (SRNC) for a multimedia service joined mobile terminal in a cell group location state and provided with stored context information for the mobile terminal (=see Fig.4, item 403 and 405),

the serving radio network controller being arranged to communicate with other radio network controllers via an Iur interface, comprising a means adapted to perform an information transfer of a multimedia service attach requesting message comprising the context information at a trigger event to all other radio network controller controlling at least one cell within the cell group of the mobile terminal and being potential drift radio network controllers (DRNCs) for the mobile terminal (=see Fig.4, items 401, 403-407).

Regarding **claim 52**, *Choi'342* discloses a radio network controller according to claim 51, wherein the context information comprises the identity of the joined multimedia service, the identity of the cell group, the temporary identity of the mobile terminal within the network, and the identity of the mobile terminal (=see page 9, lines 15-19).

Regarding **claim 53**, *Choi'342* discloses a radio network controller according to claim 51, further comprising means adapted to send a multimedia session detach requesting message to all potential DRNCs in the previous cell group upon receiving a cell group updating message from the mobile terminal and the new cell group only consist of cells controlled by new RNCs (=see page 9, lines 15-19).

Regarding **claim 60**, *Choi'342* discloses a radio network controller according to claim 51, wherein the multimedia service is a Multimedia Broadcasting/Multicasting Service (MBMS), according to the 3GPP standard (=see page 8, lines 7-9).

Regarding **claim 61**, *Choi'342* discloses a radio network controller according to claim 51, wherein the multimedia service attach requesting message is an MBMS ATTACH REQUEST, according to the 3GPP standard (=see page 8, lines 20-23, wherein the "MBMS Connection request" reads on the MBMS ATTACH REQUEST).

Regarding **claim 62**, *Choi'342* discloses a radio network controller in a radio access network being a potential drift radio network controller (DRNC) for a multimedia service joined mobile terminal in a cell group location state, the radio network controller arranged to communicate with other radio network controllers via an Iur interface (=see Fig.4, wherein it is understood that the Iur interface utilized), comprising:

means adapted to receive an information transfer of a multimedia service attach requesting message comprising context information for a mobile terminal from a radio network controller functioning as a serving radio network controller (SRNC) adapted to perform an information transfer of a multimedia service attach requesting message comprising the context information at a trigger event to all other radio network controllers controlling at least one cell within the cell group of the mobile terminal and being potential drift radio network controllers (DRNCs) for the mobile terminal (=see Fig.4, wherein it is understood that to conduct said workflow/exchange that the means are taught); and

means adapted to create and store context information for the mobile terminal

using the received message (=see Fig.4, wherein disclosed workflow diagram reads on

means to product outcome).

Regarding **claim 63**, *Choi'342* discloses a radio network controller according to

claim 62, wherein the context information comprises the identity of the joined multimedia

service, the identity of the cell group, the temporary identity of the mobile terminal within

the network, and the identity of the mobile terminal (=see page 9, lines 15-19).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 36, 41, and 64-66 are rejected under 35 U.S.C. 103(a) as being

unpatentable over *Choi'342* in view of *Choi et al* (2004/0180675 A1) (hereinafter

Choi'675).

Regarding **claim 36**, *Choi'342* discloses a method according to claim 34, but

does not disclose clearly: wherein the SRNC and the potential DRNCs will send a

multimedia session start notification based on the transferred context information when

a multimedia session start notification is received from a core network.

However, in another disclosure, *Choi'675* does teach: wherein the SRNC and the potential DRNCs will send a multimedia session start notification based on the transferred context information when a multimedia session start notification is received from a core network (=see Fig.3, Fig.4, and Fig.8, wherein item 809 reads on start notification).

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Choi'675* to assure that all UEs receive paging messages, as stated by *Choi'675* (=see par.[0042]).

Regarding **claim 64**, *Choi'342* discloses a radio network controller according to claim 62, but does not clearly teach: wherein the means adapted to send a multimedia service session start notification to the mobile terminal based on the stored context information when a multimedia session start notification is received from a core network.

However, in another disclosure, *Choi'675* does teach: wherein the means adapted to send a multimedia service session start notification to the mobile terminal based on the stored context information when a multimedia session start notification is received from a core network (=see Fig.3, Fig.4, and Fig.8, wherein item 809 reads on start notification).

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Choi'675* to assure that all UEs receive paging messages, as stated by *Choi'675* (=see par.[0042]).

Regarding **claims 41 and 65**, *Choi'342* discloses a method according to claim 34, but does not clearly teach: wherein each of the potential DRNCs create and store a

multimedia service context in case no other multimedia service joined mobile terminal is located in the cells controlled by each potential DRNC.

However, in another disclosure, *Choi'675* does teach: wherein each of the potential DRNCs create and store a multimedia service context in case no other multimedia service joined mobile terminal is located in the cells controlled by each potential DRNC (=see Fig.12, item 1206, wherein it is understood that the context is used to create and store in view of remaining items in the said figure).

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Choi'675* to assure that all UEs receive paging messages, as stated by *Choi'675* (=see par.[0042]).

Regarding **claim 66**, the combined teachings of *Choi'342* and *Choi'675* discloses a radio network controller according to claim 65, and *Choi'342* further teaches wherein the multimedia service context comprises the identity of the multimedia service and the temporary identity of the mobile terminal within the radio network (=see page 9, lines 23-26).

5.   Claims 43-48, and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Choi'342* in view of *Lee et al* (2005/0041610 A1) (hereinafter *Lee*).

Regarding **claims 43 and 54**, *Choi'342* discloses a method according to claim 34, but does not disclose clearly: further comprising the step of performing a counting procedure for each cell before a PTM/PTP decision by radio network controllers functioning as Controlling Radio Network Controllers (CRNCs).

However, in the same field of endeavor, *Lee* does teach: further comprising the step of performing a counting procedure for each cell before a PTM/PTP decision by radio network controllers functioning as Controlling Radio Network Controllers (CRNCs) (=see Fig.4 and par.[0054], wherein the "RNC" is the diagram reads on the CRNC since it is clear that it is the controlling RNC).

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Lee*, to obtain the accurate counting as disclosed in *Lee* (=see par.[0032]).

Regarding **claims 44 and 55**, the combined teachings of *Choi'342* and *Lee* discloses a method according to claim 43, and *Lee* further teaches wherein the counting procedure step is performed by paging each mobile terminal in the cell group location state individually by means of the stored context information (=see par.[0078]).

Regarding **claims 45 and 56**, the combined teachings of *Choi'342* and *Lee* discloses a method according to claim 43, and *Lee* further teaches wherein the counting procedure step is performed by including a cell group location specific paging information comprising a probability factor in a broadcasted multimedia service session start notification (=see par.[0077] and par.[0078]).

Regarding **claims 46 and 57**, the combined teachings of *Choi'342* and *Lee* discloses a method according to claim 43, and *Lee* further teaches wherein the counting procedure step is performed by estimating a probability factor for the mobile terminals of each cell (=see par.[0090]).

Regarding **claims 47 and 58**, *Choi'342* discloses a method according to claim 34, but does not teach: wherein the first cell group consists of a UTRAN Registration Area (URA) according to the 3GPP standard.

However, in the same field of endeavor, *Lee* does teach: wherein the first cell group consists of a UTRAN Registration Area (URA) according to the 3GPP standard (=see par.[0080].

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Lee*, to obtain the accurate counting as disclosed in *Lee* (=see par.[0032]).

Regarding **claims 48 and 59**, *Choi'342* discloses a method according to claim 34, but does not teach: wherein the cell group location state is a URA_PCH state according to the 3GPP standard.

However, in the same field of endeavor, *Lee* does teach: wherein the cell group location state is a URA_PCH state according to the 3GPP standard (=see par.[0080]).

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to have combined the two teachings of *Choi'342* and *Lee*, to obtain the accurate counting as disclosed in *Lee* (=see par.[0032]).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to STAMFORD HWANG whose telephone number is

(571)270-5578. The examiner can normally be reached on Monday ~ Friday 9:00AM

ET~ 6:00PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Appiah can be reached on (571)272-7904. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.H./

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617